



Maricopa Association of Governments Building Code Committee

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June 18, 2008

PURPOSE

- Understand ES process
- Issues related to reports under 2006 codes
- How can the chapter work with ES?

ICC-ES MISSION STATEMENT

- Facilitating the development and acceptance of traditional and innovative building technologies, products and systems

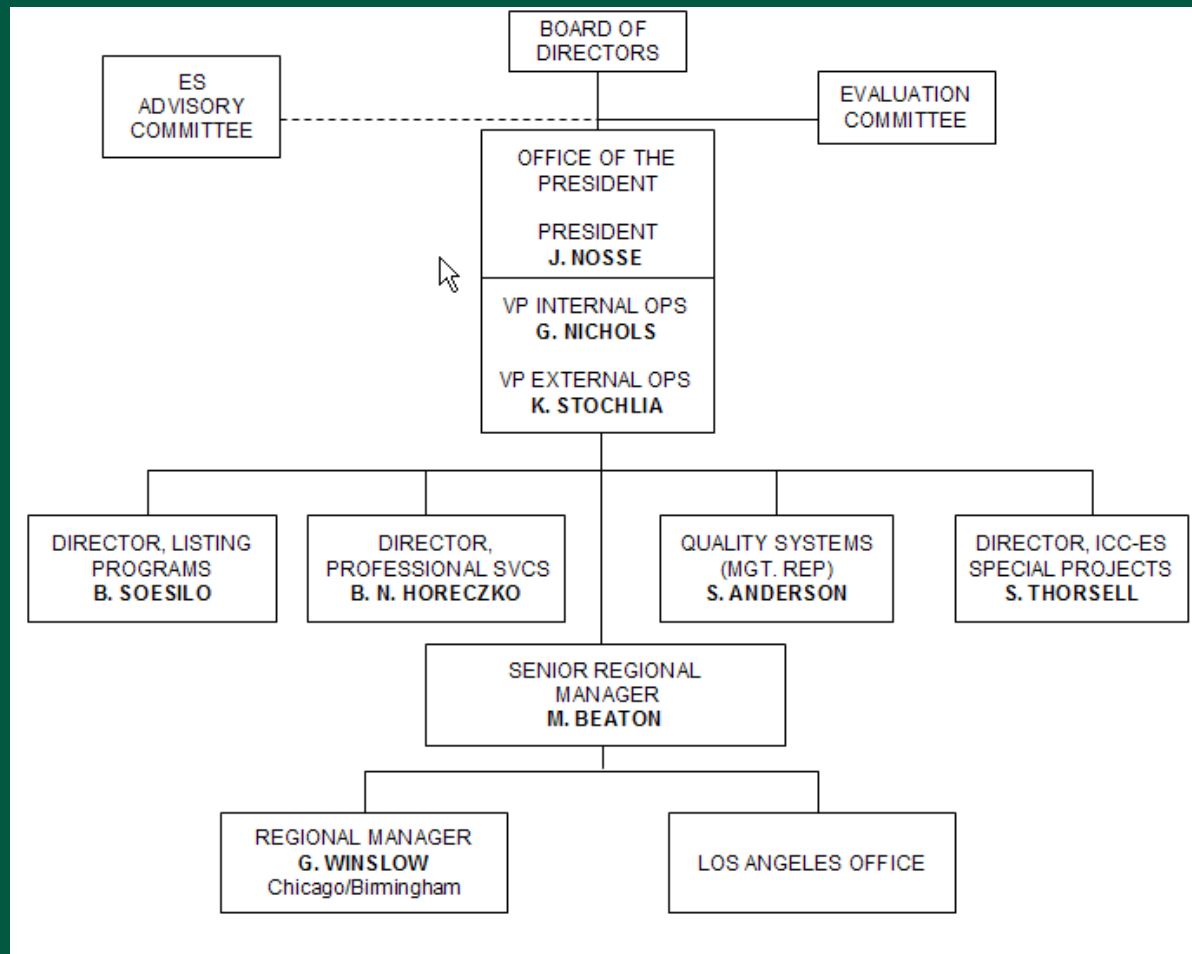
CORE VALUES

- Technical proficiency
- Transparent process
- Public hearings for development of acceptance criteria
- Consistency/level playing field
- Independent review
- Accreditation (Guide 65)

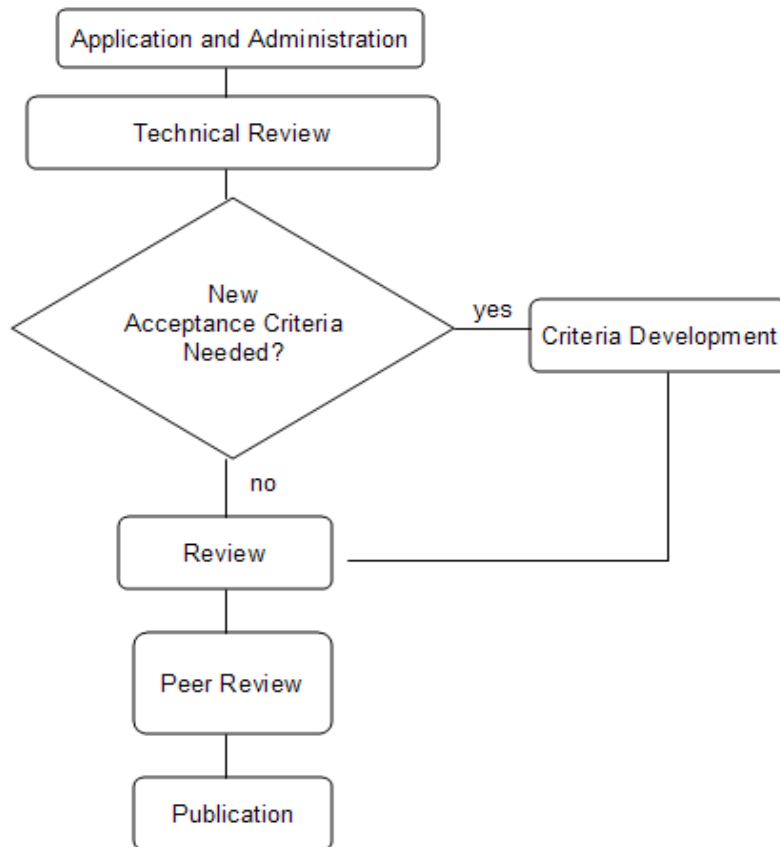
ES STAFF

- 50 total staff (32 technical staff)
- 3 offices: Los Angeles, Birmingham, Chicago
- Expertise and professional licensure: structural, civil, mechanical, quality control, fire protection
- Participate in standards development
 - ASTM, ACI, AITC, DOC, etc.
- Participate with industry associations
 - SPRI, CAMA, WIJMA, SSMA

ORG CHART



REVIEW PROCESS



ACCEPTANCE CRITERIA

- Foundation of the ES program
- Alternate products must be addressed in an acceptance criteria
- Acceptance criteria are guidelines to assist staff and applicants in identifying data needed for an evaluation report
- Acceptance criteria are developed by ICC-ES solely for the purpose of issuing ICC-ES evaluation reports

AC PROCESS

- 10 member committee of building officials
- 3 meetings per year
- Notice of meetings provided 30 days in advance
 - Posted to ICC-ES website
 - Written notice to report holders and applicants
 - E-mail notice
- Evaluation Committee represents the interests of the ICC Membership

GENERAL REQUIREMENTS

- Testing Laboratories:
 - Must comply with ISO 17025
 - Must be accredited by IAS, A2LA, NVLAP or others (by mutual agreement)

GENERAL REQUIREMENTS

- Inspection Agencies:
 - Must comply with ISO 17020
 - Must be accredited by IAS

GENERAL REQUIREMENTS

- Quality control documentation
- Qualifying inspection of manufacturing facilities
- All report holders must demonstrate a quality system that ensures the product being manufactured is the same as that used in qualifying tests
- Provide assurance that the manufactured product will not change from the product described in the original qualifying data

ES REPORTS

- 1500 current ESR's and legacy reports
- 900 companies
- 900 remaining legacy reports (650 address the UBC)

CHALLENGES FOR ES

- Conversions from legacy codes to International Codes
 - Examples –
 - Anchors in cracked concrete
 - Seismic factors for lateral force resisting assemblies
- Quality of data
- Complexity of code
- Industry competition
- Consistency among three offices

CONVERSION TO 2006 CODES

Still in process due to:

- Enforcement of 2006 Codes in California
- Significant differences from 1997 UBC
- Manufacturers reluctance to convert – cost and time

MOVING FORWARD

- Additional staff
- Alternate processes for acceptance criteria
- Programs with major manufacturers and industry groups to clarify requirements and improve data submittals
- More specialization among staff

LISTING vs EVALUATION

- Listings are evidence of compliance with a standard
- Evaluation reports look at code compliance
 - Example: roof covering
 - Listing: roof classification
 - Evaluation report:
 - Roof Classification
 - Wind resistance
 - Impact resistance
 - Physical properties
 - Durability

USE OF ICC-ES ACCEPTANCE CRITERIA BY OTHERS

- Inappropriate because they don't have:
 - Knowledge of the basis for each of the requirements
 - A process for revisions and interpretation
 - The link to ICC and the knowledge of the code

EXAMPLE: SANDWICH PANELS (AC04)

Transverse load tests per ASTM E 72

- AC04 requires end conditions (means of attachment) be addressed
- As much as 40% reduction in allowable loads when end conditions are addressed compared to simple span tests

HOW CAN THE CHAPTER WORK WITH ES?

- Communication
 - What issues are facing Chapter Members?
 - ES notification – what would Chapter Members like to hear from ES?
- ES is here to provide information to code officials
 - Evaluation reports
 - Chapter presentations
 - What else can we do?

SUMMARY

- ES program is a proven procedure for developing requirements for alternate materials
- Participation of code officials, manufacturers, the engineering community, academia
- Evaluation reports that are directed to the needs of the building official
- Review that is independent of the testing and inspection functions
- Veteran staff – senior staff have more than 20 years experience



THANK YOU